D4131-5 Work Order ID 108987 B108987

Memo

QC

Quality Control

108987

Page 1

October-31-13 12:48:30 PM *N900040100* Item ID: D4131-5 Accept Setup Start **Revision ID:** Side Plate Item Name: *20* 10/31/13 **Start Qty: 20.00 Start Date: Cust Item ID:** Required Date: 11/14/13 Req'd Qty: 20.00 *20* **Customer:** Reference: Run Start Process Plan: MC5 Date: 13-10-31 Tooling: Date: Approvals: Stop QC: Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Reject Accept Reject Insp. Work Center ID Description Qty Qty Code Number Stamp **Run Hours** Draw Nbr **Revision Nbr** В D4131 100 0.00 *100* 20 ____ Jm1311-23 Waterjet 0.00 Memo FLOW CNC Waterjet 1-Cut as per Dwg 304.050 Prog Rev: ____3 2-Deburr if necessary QC2- Inspect parts off machine FAI/FAIB 0.00 *110* 200 Jm 13-111-23 0.00

| DQA: Date: | | | | | | | | | | | TANDT | | |
|---------------|----------|---------|-----------|--------|----------|------------------------------|-----------|-----------|----------------------|-----------------------|---------------|---------------|--------------------|
| QA Closed: | | | Date: | | | WORK ORDER NON | -C(| ONFO | RMANCE / UPE | | ork Order up | ndate only | AEROSPACE |
| | | | | | | | | | | | | | |
| Work Orde | er: | | | | | DISPOSITION AGAIN: | | | AGAINST DE | ST DEPARTMENT/PROCESS | | | |
| | | | | Rework | | | Skid-tube | Crosstube | | Water Jet | Engineering | | |
| Part N | No | | | | | Scrap | | , | Machining | Small Fab | Pro | d. Eng. Coor. | Quality |
| | | | | | | Use-as-is | | Thern | noforming | Finishing | Rec/Stor | e/Packaging | Other |
| NCR N | No | _ | | | | Suspected Unapproved |] | | Large Fab (| Composite | | Supplier | |
| Root | <u> </u> | Т | | | Desci | ription of work order update | | Initial | Action | <u> </u> | Sign & | | 1 |
| Cause | Di | ate | Step | Qty | Desci | or non-conformance | | ief Eng | i . | | Date | Verification | QC Inspector |
| Design | | - | Jtep | αι, | - | or non-comornance | 1 | iici ciig | Descript | CIOII | Date | Vermeation | Qe mspector |
| Doc/Data | | | | | | | | | | | : | | |
| Equip/Tooling | | ŀ | | | | | | | | | | | |
| Handling/Pre | | ļ | | | | | | | , | | | | |
| Material | | | | | | | | | | | | | |
| Operator | | | | | | | | | | | | | |
| Offset/Setup | | | | | | | | | • | | | | |
| Process | | | | | | | | • | | | | | |
| Supplier | | | | | | | | | | | | | |
| Training | | l | | | | | | | | | | | |
| Transport | | | | | | | | | | | | | |
| Unapproved | | | | | | | | | | | | | |
| | | | | | | | FAI | ULT CA | TEGORY | | | | |
| Landi | ng Gear | | | | | General | | | | | _ | | |
| | Bend | ding | | | | Bend | | Folio/F | Program | | Outside Dim | ensions | Pressure/Forced |
| | Cent | re Not | Concen | itric | | BOM/Route | | Grain | • | | Over/Under | tolerance | Set-up |
| | Crac | ks | | | | Broken/Damage/Defect | | Hardwa | ire | | Part Incorred | it | Temperature/Cure |
| | Crim | p/Kink | /Ripple/ | /Wave | | Burrs | L | Inspect | ion Incomplete/Unqu | ualified | Part Lost/Mi | ssing | Weld |
| | Cuff | | | | | Contamination | | Instruct | tions Incomplete/Unc | lear | Part Moved | | Wrong Stock Pulled |
| | | hing | | | | Countersink | L_ | Misalig | gned/off center | | Positioned V | Vrong | |
| | _ | t Treat | | | | Cut Too Short | _ | Mislabe | eled | | Power Loss/: | Surge | Other |
| | | | Strip in | Tube | | Drawing | | Misread | d | | | | |
| | _ | ks/Cha | | | <u> </u> | Drill Holes | | Off-set | | | | | |
| | _ | - | quence | | | Finish | | Out of 0 | Calibration | | | | |
| | l lWav | e/Twi | st in Tub | e | | Fit/Function | 1 | Out of | Sequence | | | | |

H:/FORMS/Quality Assurance\approved QA/NCRWO RevH

| Work Orde | | | | Pa | | | | | |
|---|-----------------------|---|--------------------|------------------------------------|----------------------------|----------------|-------------------|------------------|------------------------------|
| Item ID: Revision ID: Item Name: | D4131-5 Side Plate | | | Accept | *N90004 | N1 00 |)* Set | up Start Stop | *NS1* *NS2* |
| Start Date: Required Date: Reference: | 10/31/13 | Start Qty: 20.00 Req'd Qty: 20.00 | *20* *20* | | Cust Item ID: Customer: | | | | 14.17 |
| Approvals: | Process Pla | an: | Date: | Tooling: SPC (Y/N): | Date: | | Ru | n Start Stop | *NR1* *NR2* |
| Sequence ID/ Work Center II 120 *120 C Quality Control | D | Operation Description QC8- Inspect parts - second | nd check | Set Up/ Run Hours DAS 0.00 27 9-89 | _ | # Plan Code | | | Reject Insp. Number Stamp |
| *130 *130* Packaging Packaging | | Identify as per dwg & Sto | ock Location: | 0.00 | | | DAS 32 9-89 | 13/4/ | 100 (20) |
| 140 : *4:4 ^ * | · | QC21- Final Inspection - | Work Order Release | 0.00 | | | | 131 | 11/22/0 |

0.00

Memo

Quality Control

110-11-25

| DQA: | QA: Date: | | | | | MODE ODDED NON | "DART | | | | | | |
|---------------|-------------------------------------|--|---------------------------------------|----------------|----------|---|------------------------|---------------------|---|-----------|--------------------|---------------|------------------|
| QA Closed: | | | Date: | | | WORK ORDER NON- | | JINFOI | RIVIAINCE / OPDA | | ork Order up | date only | AEROSPACE |
| Marile Onda | | | | | | DISPOSITION | | | Д | | | | |
| Work Orde | :· — | | · · · · · · · · · · · · · · · · · · · | | | Rework | . 1 | Skid-tube Crosstube | | | Water Jet | | Engineering |
| Part No. | | | | Scrap | | | — | mall Fab | Prod. Eng. Coor. | | Quality | | |
| raiti | ' 0. — | | | | | Use-as-is | | • | ~ — | Finishing | 1 | e/Packaging | Other |
| NCR N | No. | | | | | Suspected Unapproved | | | ⊸ ⊢ | mposite | 11.00,0101 | Supplier | 1 1 |
| | _ | | | | | | ' | | | ' - |) | | - |
| Root | | | | | Desci | ription of work order update | ı | nitial | Action | | Sign & | | |
| Cause | | Date | Step | Qty | | or non-conformance | Ch | ief Eng | Descriptio | on | Date | Verification | QC Inspector |
| Design | | | | | | | | | | | | | |
| Doc/Data | | | | | | | ŀ | | | | | | , |
| Equip/Tooling | | | | | , | | | | | | | | · |
| Handling/Pre | | | | | | | | | | | | | |
| Material | | | | | | | | | | | | | |
| Operator | | | | | | | | | | | | | |
| Offset/Setup | | | | | | | | | | | | | |
| Process | | | | | | | | | | | | | |
| Supplier | \Box | | | | | | | | | | | | |
| Training | | | | | | | | | | | | | |
| Transport | | | | | | | | | | | | | |
| Unapproved | | | | L | L | · · · · · · · · · · · · · · · · · · · | <u> </u> | | | | | | |
| | | | | | | • | FAI | ULT CAT | regory | | | | |
| Landi | | | | | _ | General | | 1 /- | | | 1 | | ٦ |
| | \vdash | ending | | | <u> </u> | Bend | \vdash | 1 | Program | - | Outside Dim | | Pressure/Forced |
| | \vdash | | t Concer | ntric | \vdash | BOM/Route | <u> </u> | Grain | | | Over/Under | | Set-up |
| | ⊢ | racks | . . / 0 : | /\ 4.1== | \vdash | Broken/Damage/Defect | <u> </u> | Hardwa | | ı:c: | Part Incorred | | Temperature/Cure |
| | \vdash | • | ık/Ripple | wave | - | Burrs | - | 1 | ion Incomplete/Unqual | | Part Lost/Mi | ssing | Weld |
| | Cuffs | | _ | Countamination | \vdash | 4 | tions Incomplete/Uncle | ear | Part Moved | <u></u> | Wrong Stock Pulled | | |
| 1 | \vdash | rushing | | | - | Countersink | - | 1 ' | gned/off center | - | Positioned V | | 704600 |
| | Heat Treat Inspection Strip in Tube | | - | Cut Too Short | <u> </u> | Mislabe | | <u> </u> | Power Loss/ | Surge | Other | | |
| | | ispectioi Iarks/Ch | · . | eauı | - | Drawing Drill Holes | - | Misread | | | | | |
| | $oldsymbol{oldsymbol{	o}}$ | • | | | - | 1 | \vdash | Off-set | | | | · | |
| | \vdash | | equence ist in Tul | | | Finish Fit/Function | - | 4 | Calibration · · · · · · · · · · · · · · · · · · · | | | | |
| | | ************************************** | 4.3 L 11 L 1 4.11 | 41° | | TERRET MIRCHOTT | | TEAL COL | JEMUTINE. | | | | |

H:/FORMS/Quality Assurance\approved QA/NCRWO RevH

Picklist Print

October-31-13 12:48:34 PM

Parent Item Name: Side Plate

Work Order ID: 108987

108987

D4131-5 Parent Item:

D4131-5

Start Date: 10/31/13

Required Date: 11/14/13

Page 1

Start Qty: 20.00

Required Qty: 20.00

Comments:

IPP Rev:A 10.10.06 new issue DD verf:EC

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|-----------|
| M304S18GA | - | Purchased | No | | | 100 | sf | 319.3774 | 0.0556 | (2) | | | |
| *M304S18 | RGA* | | | | | | | | ** | | | Jm | 113-11-23 |

304/316 .050 Sheet

| Location | Loc Qty | Loc Code | |
|----------|-----------|----------|--|
| MAT019 | 166.45001 | | |
| 117188 | 3.88 | | |
| 117766 | 5 | | |
| 120604 | 5 | | |
| 122325 | 3 | | |
| 123155 | 3 | | |
| 124572 | 0.00001 | | |
| M126647 | 146.57 | | |
| MAT020 | 152.92742 | | |
| 120243 | 0.928 | | |
| 121626 | 1.529894 | | |
| 124029 | 84.046526 | | |
| M126098 | 66.423 | | |

125552

125552.

| DQA: Date: | | | | | | | | | | | | • | TRAGR | | |
|--------------------|---------------------|-----------|----------|--------------------------------|-------|---|------------------------|----------------------------|-------------------|-------------------------------|--------------------------|---------------|---------------------|---|--------------------|
| QA Closed: | | | Date: | | | WORK ORDER NON | -C(| ONFO | RMANCE / UF | | Wo | ork Order up | odate only | | AEROSPACE |
| Work Orde | er: | | | • | | DISPOSITION | | AGAINST DEPARTMENT/PROCESS | | | | | | | |
| Part No. | | | | Rework Scrap | | Skid-tube Crosstube Machining Small Fab | | | | Water Jet Prod. Eng. Coor. | | | Engineering Quality | | |
| NCR No. | | | | Use-as-is Suspected Unapproved | | Thern | noforming Large Fab | Finishing Composite | | Rec/Stor | re/Packaging Supplier | _ | Other | | |
| Root | | | | | Desci | ription of work order update | ı | Initial | Acti | ion | | Sign & | | | |
| Cause | | Date | Step | Qty | | or non-conformance | Ch | ief Eng | Descri | iption | | Date | Verification | n | QC Inspector |
| Design Doc/Data | | | | | | - | | | | | | | | | |
| Equip/Tooling | \Box | | | | | | | | | | | | | | |
| Handling/Pre | \Box | i | | | | | | | | | | | | | |
| Material | | : | | | | | | | | | | | | | |
| Operator | | | | | | | | | | | | | | | |
| Offset/Setup | | | | | | | Ì | | | | | | | | |
| Process | | | | | | | • | | | | | | | | |
| Supplier | | | | | | | | | | | | | | 1 | |
| : Training | | ! | | | | | | | | | | | | | |
| Transport | | | | | | | | | | | | | | | , |
| Unapproved | | | | | | | | | | | | : | | | |
| | | | | _ | | | FAI | ULT CAT | TEGORY | | | | | | |
| Landi | ng Ge | ar | | | | General | | | | | | | | | |
| | В | ending | | | | Bend | | Folio/P | rogram | | | Outside Dim | ensions | | Pressure/Forced |
| | | entre No | t Concer | ntric | | BOM/Route | | Grain | | | | Over/Under | tolerance | | Set-up |
| | | racks | | | | Broken/Damage/Defect | | Hardwa | ire | | | Part Incorred | ct | | Temperature/Cure |
| | | rimp/Kin | k/Ripple | /Wave | | Burrs | | Inspecti | ion Incomplete/Un | qualified | | Part Lost/Mi | ssing | | Weld |
| , | | uffs | | | | Contamination | | Instruct | ions Incomplete/U | nclear | | Part Moved | : | | Wrong Stock Pulled |
| : | | rushing | | | | Countersink | | Misalig | ned/off center | | | Positioned W | | | • |
| | \Box ⁺ | eat Trea | t | | | Cut Too Short | | Mislabe | eled | | | Power Loss/S | Surge | | Other |
| | _ | - | Strip in | Tube | | Drawing | | Misread | b | • | | | | | |
| | | 1arks/Ch | | | | Drill Holes | | Off-set | | | | | | | |
| | _ | urning Se | | | | Finish | | Out of (| Calibration | | | | | | |
| | Wave/Twist in Tube | | | Fit/Function | 1 | Out of s | Out of Sequence | | | | | | | | |

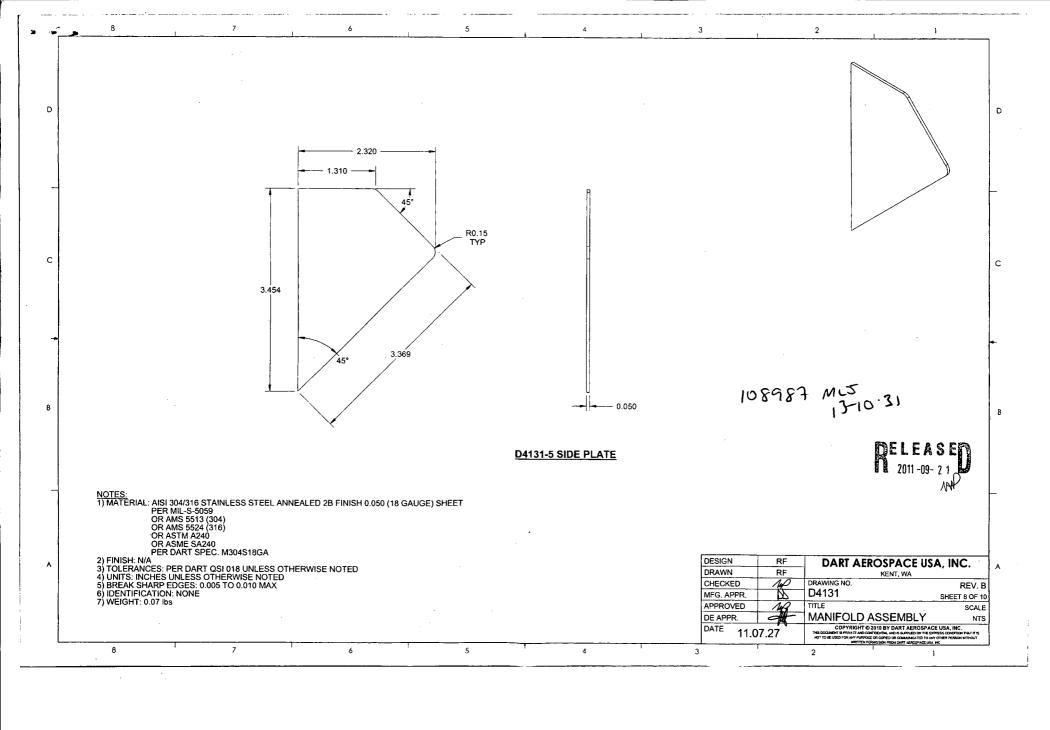
| DART AEROSPACE LTD | Work Order: | 108987 |
|------------------------------|--------------|-------------|
| Description: Side Plate | Part Number: | D4131-5 |
| Inspection Dwg: D4131 Rev: B | | Page 1 of 1 |

FIRST ARTICLE INSPECTION CHECKLIST

| Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|----------------------|-----------|------------------|--------|--------|-------------------------|----------|
| 2.320 | +/-0.010 | Z-3aa" | - | | υ | Jknoi |
| 1.310 | +/-0.010 | 1.314 | | | V | |
| 3.369 | +/-0.010 | 3.368 | _ | | ν | |
| 3.454 | +/-0.010 | 3.456" | _ | | U | |
| 0.050 | +/-0.010 | 0.049 | | | V | |
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| Measured by: | Jn | Audited by: | | Preliminary Approval: | |
| Date: | 13-11-23 | Date: | 13 1/2 | Date: | |

| Rev | Date | Change | Revis | ed by | Approved |
|-----|----------|-----------------|-------|--------|----------|
| Α | 10.10.25 | New Issue | KJ | -10 | 11 |
| В | 12.03.08 | Dwg Rev updated | KJ | ΦXX | |
| | | | | - 77 F | 7-9-4 |



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